



Build Embedded Canvas PowerApps to Replace Your Dialogs

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Who Am I?

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Agenda

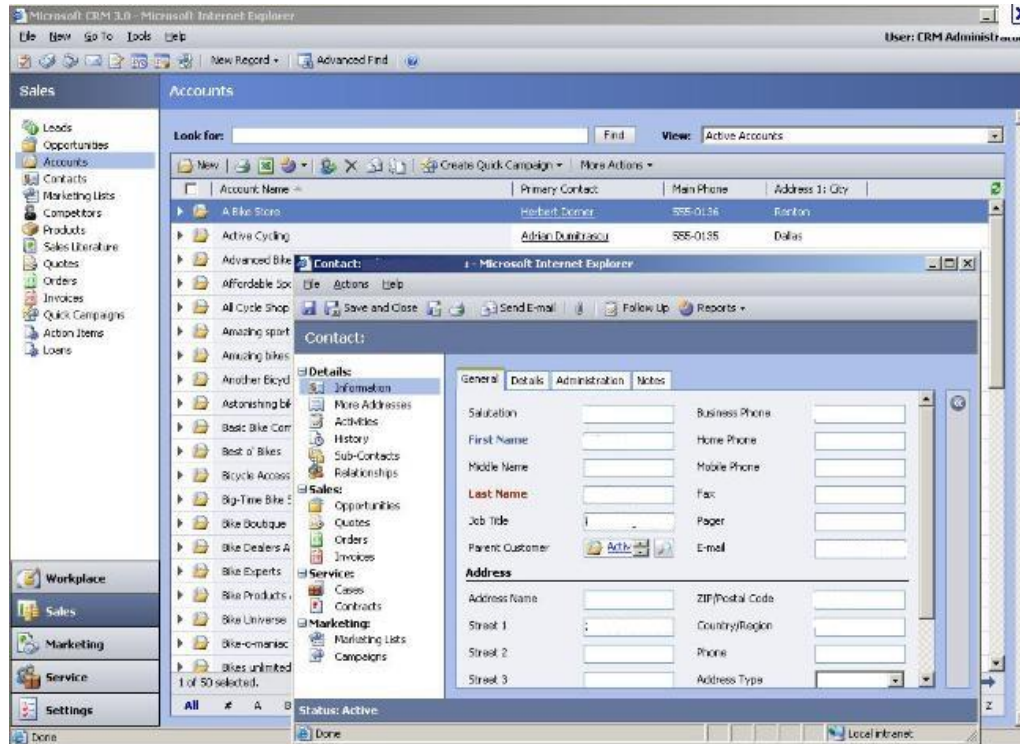
- Intro
- What is the Power Platform?
- Using Dialogs
- Replacing Dialogs with Embedded Canvas Apps
- How to Embed a Canvas App on a Model Driven Form
- Q&A



What is the Power Platform?



Dynamics CRM: In the Beginning



Dynamics CRM

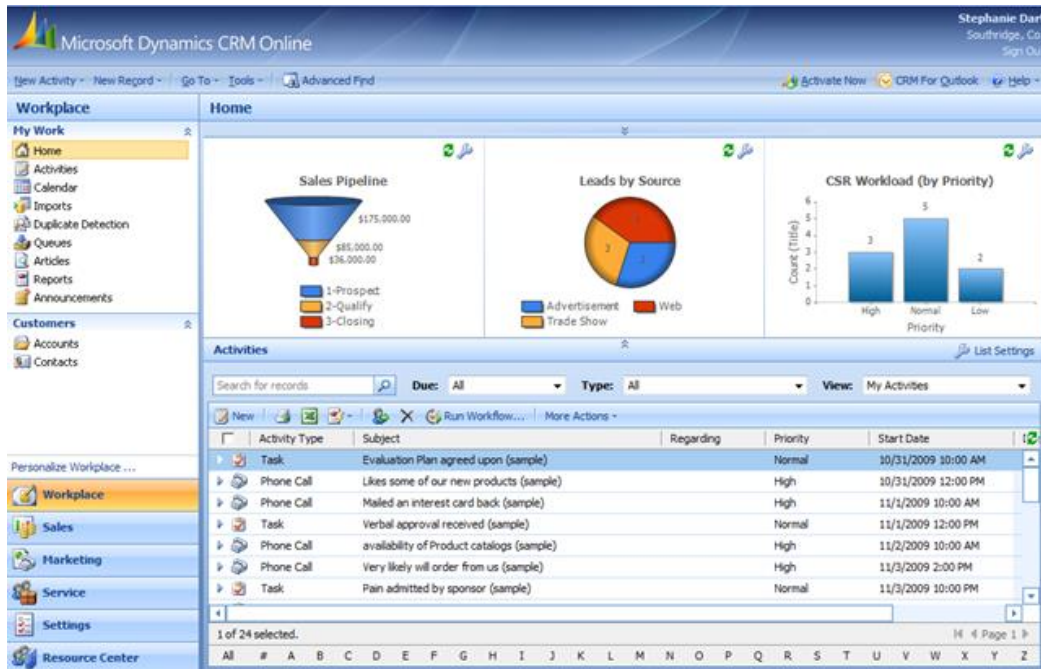
- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL



Dynamics CRM Online



Dynamics CRM Online

- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL

AZURE/Office 365



xRM – Unique Line of Business Apps



Unique Line of Business Apps
a.k.a. xRM Applications
“anything” Relationship Management

Dynamics CRM/CRM Online

- Sales
- Service
- Marketing

Business Application Layer

Microsoft SQL

AZURE



xRM – Unique Line of Business Apps



- **Data Entity and Relationships**
- **Multi-user**
- **Web Based**
- **User Security and Authentication**
- **User Interface**
- **Automation (Workflow)**
- **Reporting**
- **Integration**
- **Mobile**
- **Etc...**

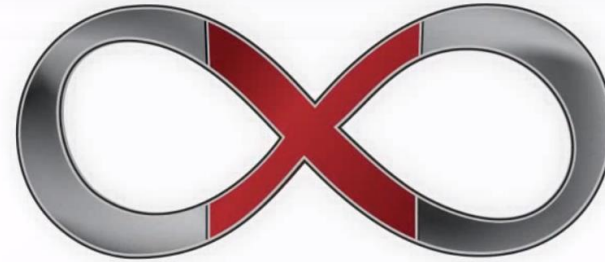


xRM – Unique Line of Business Apps

xRM

One Platform. Many Applications.

<https://youtu.be/Yru5CkANOKA>



P O S S I B I L I T I E S



Side Conversation: Dynamics 365?



Microsoft Marketing to the Rescue!



Dynamics 365



Dynamics 365



Dynamics 365



Microsoft
Dynamics 365



Dynamics 365 (CRM, F&O, Bus. Central)

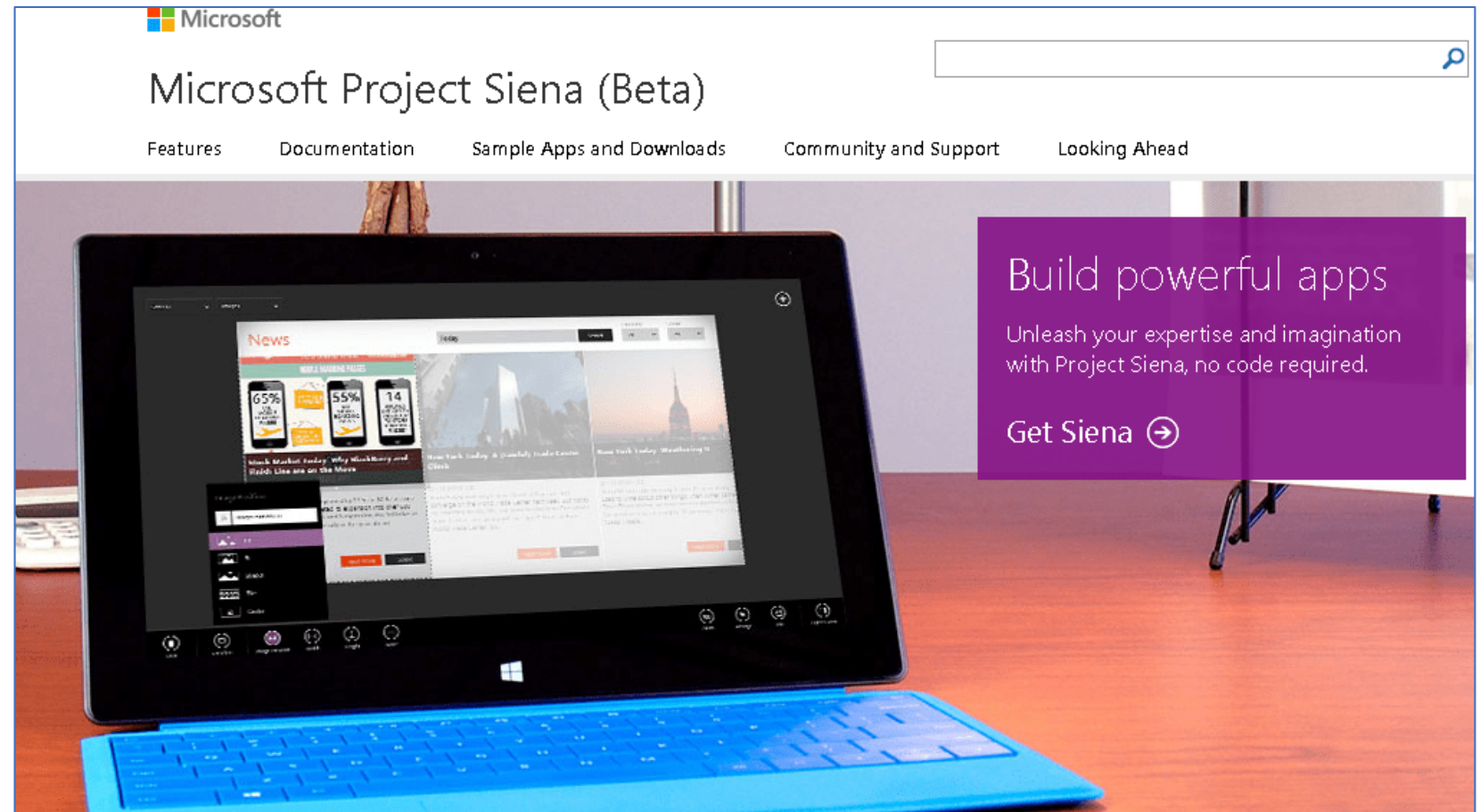


Unique Line of Business Apps a.k.a. xRM Applications “anything” Relationship Management	Dynamics 365 Finance & Operations	Dynamics 365 Business Central
Dynamics 365 for Customer Engagement <ul style="list-style-type: none">• Sales• Service• Marketing		
Business Application Layer		
Microsoft SQL		
AZURE		





Project Siena

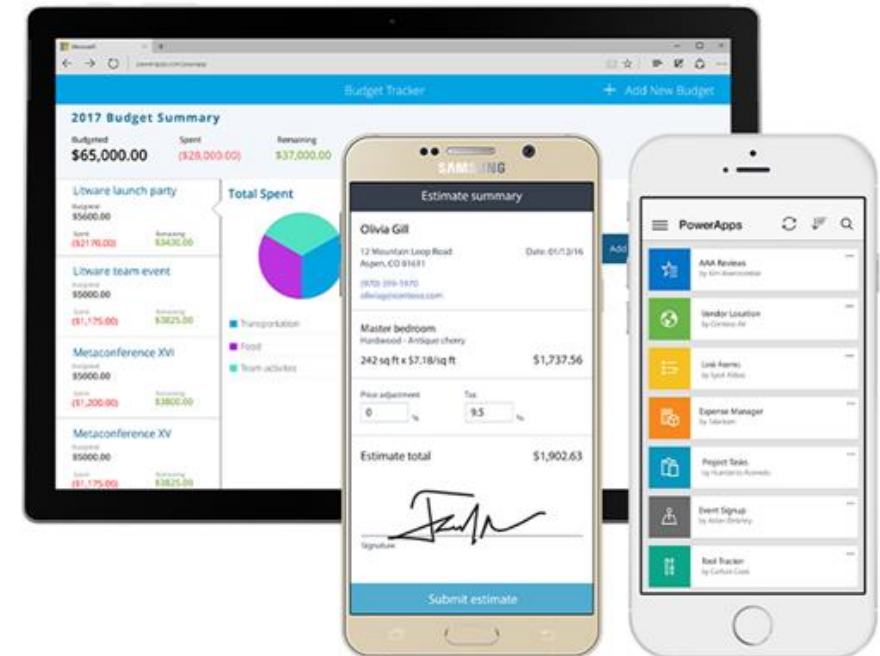


“Classic” PowerApps

PowerApps – low code/no code

- SharePoint
- Office 365
- SQL
- etc

AZURE

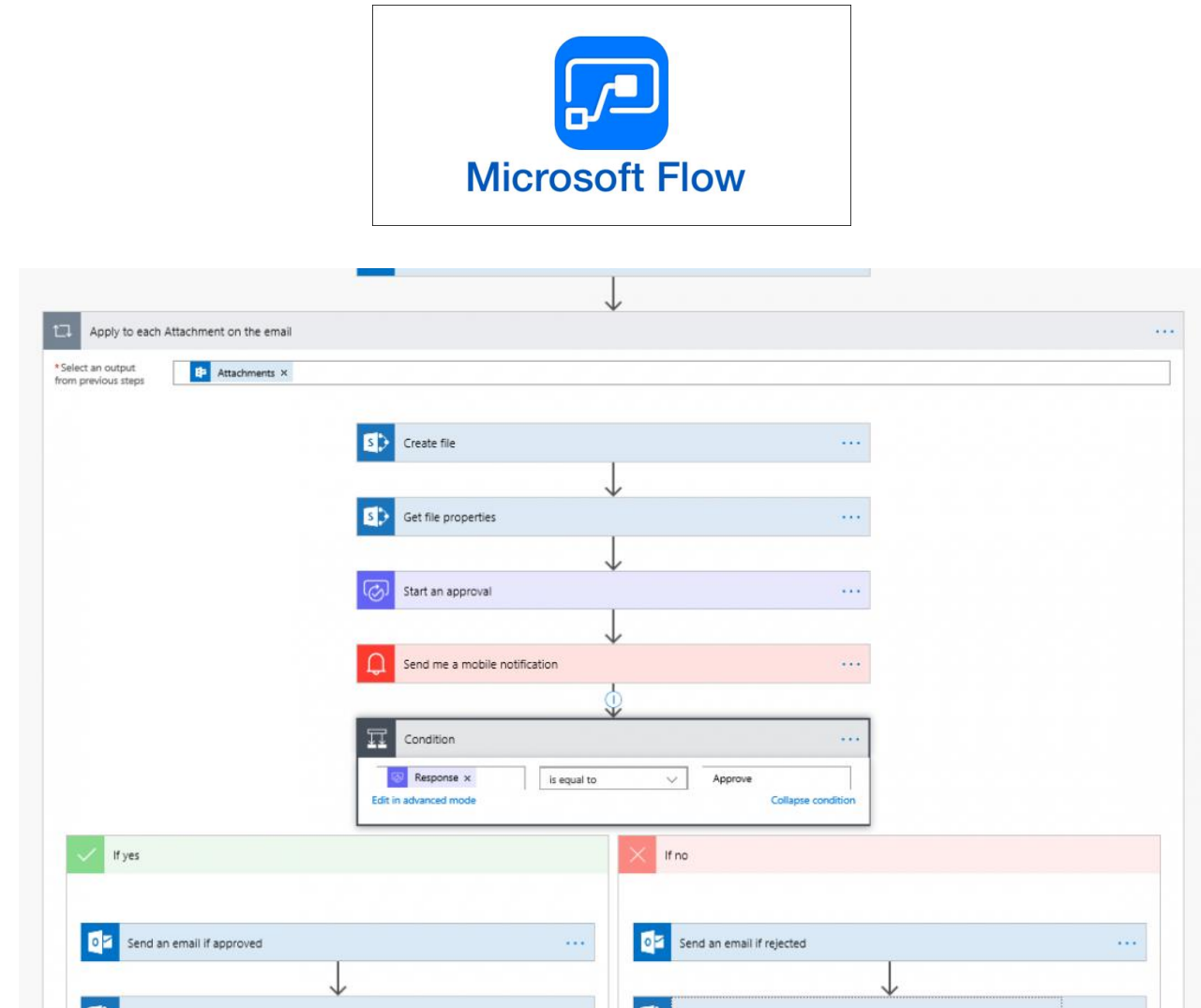


Microsoft Flow

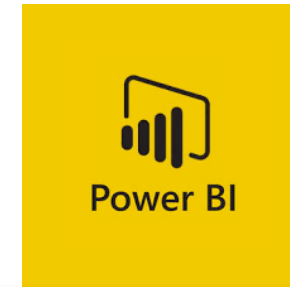
Flow – low code/no code workflows

- SharePoint
- Office 365
- SQL
- Etc

AZURE



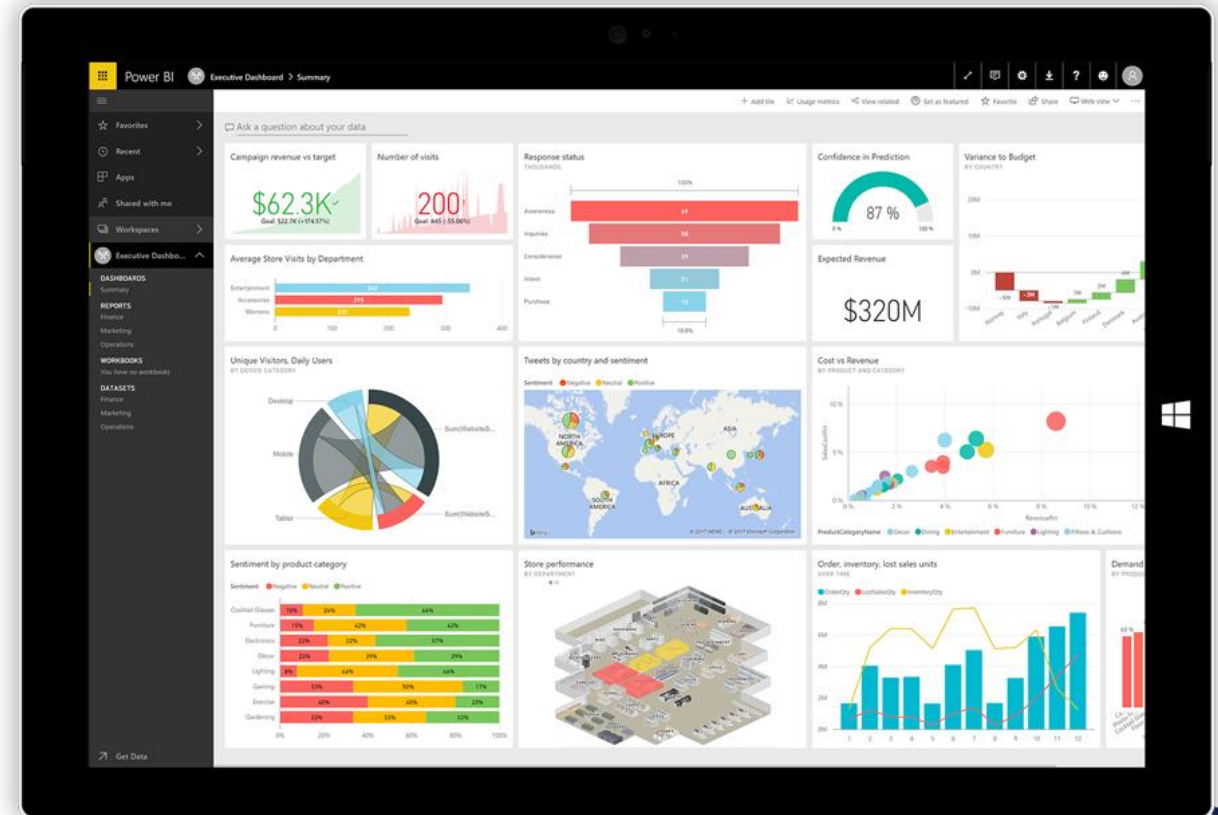
PowerBI



Power BI – Reporting

Any data source

AZURE



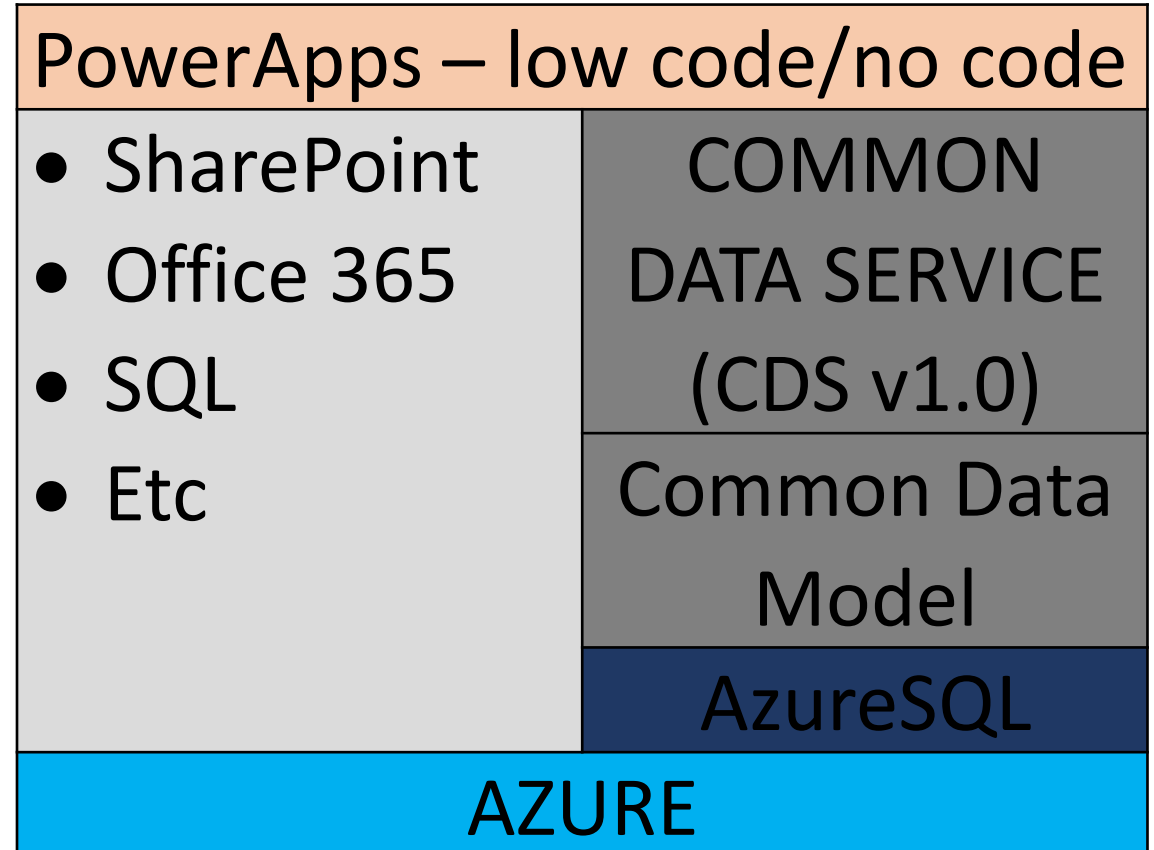
Maybe need a Database with Common Entities...?



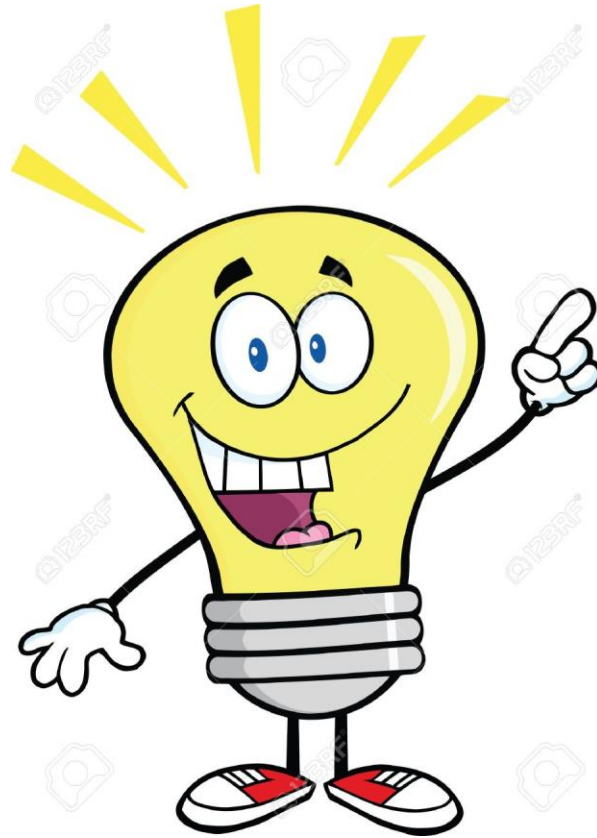
Common Data Service

Common Entities like;

- Accounts
- Contacts
- Activities...



What can we do with this new tech?



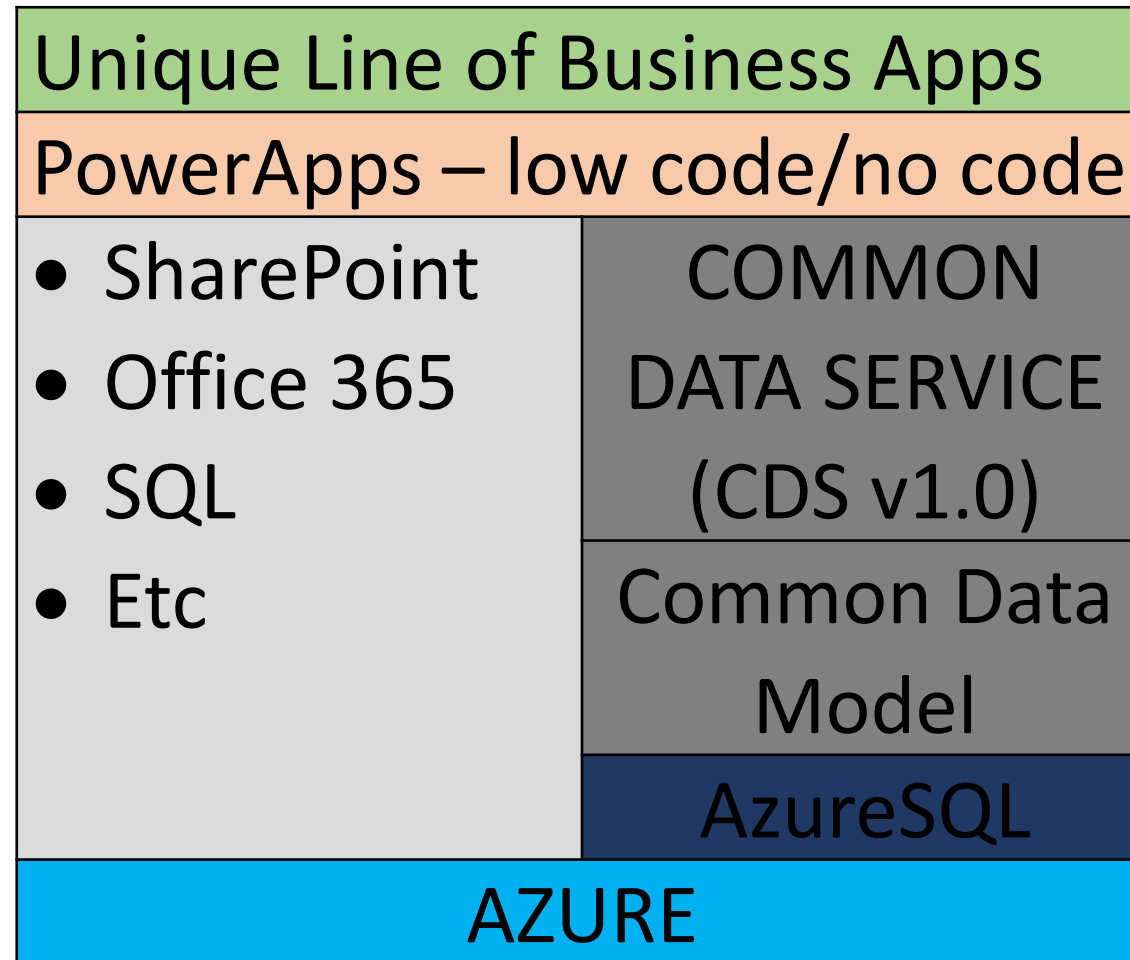
PowerApps – Unique Line of Business Apps



- **Data Entity and Relationships**
- **Multi-user**
- **Web Based**
- **User Security and Authentication**
- **User Interface**
- **Automation**
- **Reporting**
- **Integration**
- **Mobile**
- **Etc...**



What can we do with this new tech?



Wait a minute... don't we
have that already?





Microsoft Marketing to the Rescue!



 PowerApps

 PowerApps

 PowerApps

 PowerApps

 PowerApps

 PowerApps



And Marketing Created Some Stickers

Solution: Default Solution - Microsoft Dynamics CRM - Google Chrome

Not secure | d365base:5555/TEST2013/tools/solution/edit.aspx?id=%7bfd140aaf-4df4-11dd-bd17-0019b9312238%7d

File Save and Close Export Solution Import Translations Export Translations Publish All Customizations Actions Help

Solution: Default Solution

Information

Solution Default Solution

Component Type All

New Delete Publish Show Dependencies Managed Properties

✓	Display Name ↑	Name	Type	State	Customizable	Descriptic	
	A Yes or No boolean	field_security_permission_t...	Option Set	Managed	False	A Yes or No	
	Account	account	Entity	Managed	True	Business the	
	Account Distribution	Account Distribution	Report (Reporting Services...	Managed	True	Identify patt	
	Account Distribution Detail	Account Distribution Detail	Report (Reporting Services...	Managed	True	Sub-report	
	Account Manager	Account Manager	Connection Role	Managed	True		
	Account Overview	Account Overview	Report (Reporting Services...	Managed	True	View a one-	
	Account Overview Sub-Report	Account Overview Sub-Re...	Report (Reporting Services...	Managed	True	Sub-report	
	Account Reconnect	Account Reconnect	Email Template	Managed	True	Use this tem	
	Account Summary	Account Summary	Report (Reporting Services...	Managed	True	View a chro	
	Account Summary Sub-Report	Account Summary Sub-Re...	Report (Reporting Services...	Managed	True	Sub-report	
	Activities	Activities	Report (Reporting Services...	Managed	True	Display a lis	
	Activities Detail	Activities Detail	Report (Reporting Services...	Managed	True	Sub-report	
	Activity	activitypointer	Entity	Managed	True	Task perform	
	Activity Feeds	Activity Feeds	Security Role	Managed	False		
	Activity Type	activitypointer_activitytype	Option Set	Managed	False	Type of acti	

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Page 1



And Marketing Created Some Stickers

PowerApps

File Save and Close Show Dependencies Export Solution Translations Publish All Customizations Actions Help

Solution: Default Solution

Entities

Solution Default Solution

Information Components Entities Option Sets Client Extensions Web Resources Processes Plug-in Assemblies Sdk Message Processin... Service Endpoints Dashboards Dialog Boxes Reports Connection Roles Article Templates Contract Templates Email Templates Mail Merge Templates Security Roles Field Security Profiles Routing Rule Sets Record Creation and U... SLAs Model-driven Apps Custom Controls

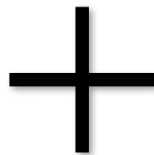
Component Type Entity View Customizable

New Delete Publish Show Dependencies Solution Layers Managed Properties Configure Relevance Search

	Display Name ↑	Name	Schema Name	State	Customizable	Aud
	Account	account	Account	Managed	True	Disabl
	Action Card	actioncard	ActionCard	Managed	True	Disabl
	Action Card Role Setting	msdyn_actioncardrole...	msdyn_actioncardrole...	Managed	True	Disabl
	actioncardregarding	msdyn_actioncardrega...	msdyn_actioncardrega...	Managed	True	Disabl
	Activity	activitypointer	ActivityPointer	Managed	True	Non A
	Ad	adx_ad	Adx_ad	Managed	True	Disabl
	Ad Placement	adx_adplacement	Adx_adplacement	Managed	True	Disabl
	Address	customeraddress	CustomerAddress	Managed	True	Disabl
	Alert Subscription	adx_alertsubscription	adx_alertsubscription	Managed	True	Disabl

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Power BI



Microsoft Flow



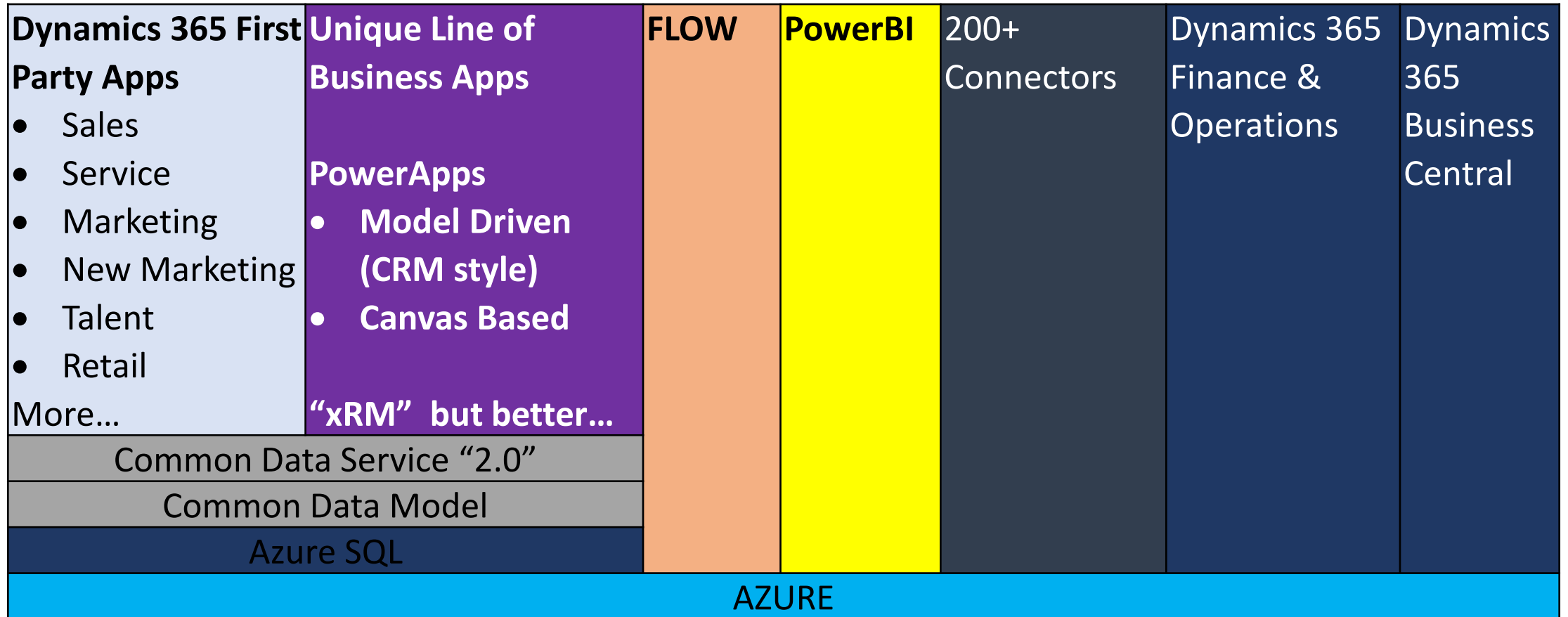
PowerApps



POWER PLATFORM!



The Power Platform



Terminology

- Classic Web Interface
- Unified Interface
- Canvas App
- Model Driven App
- PowerApp Component Framework control



Classic Web Interface

- Existing “CRM” style interface
- Build for Web Browsers
- Tricky to navigate
- Lots of white space
- Introduced in CRM 2013
- Will be deprecated

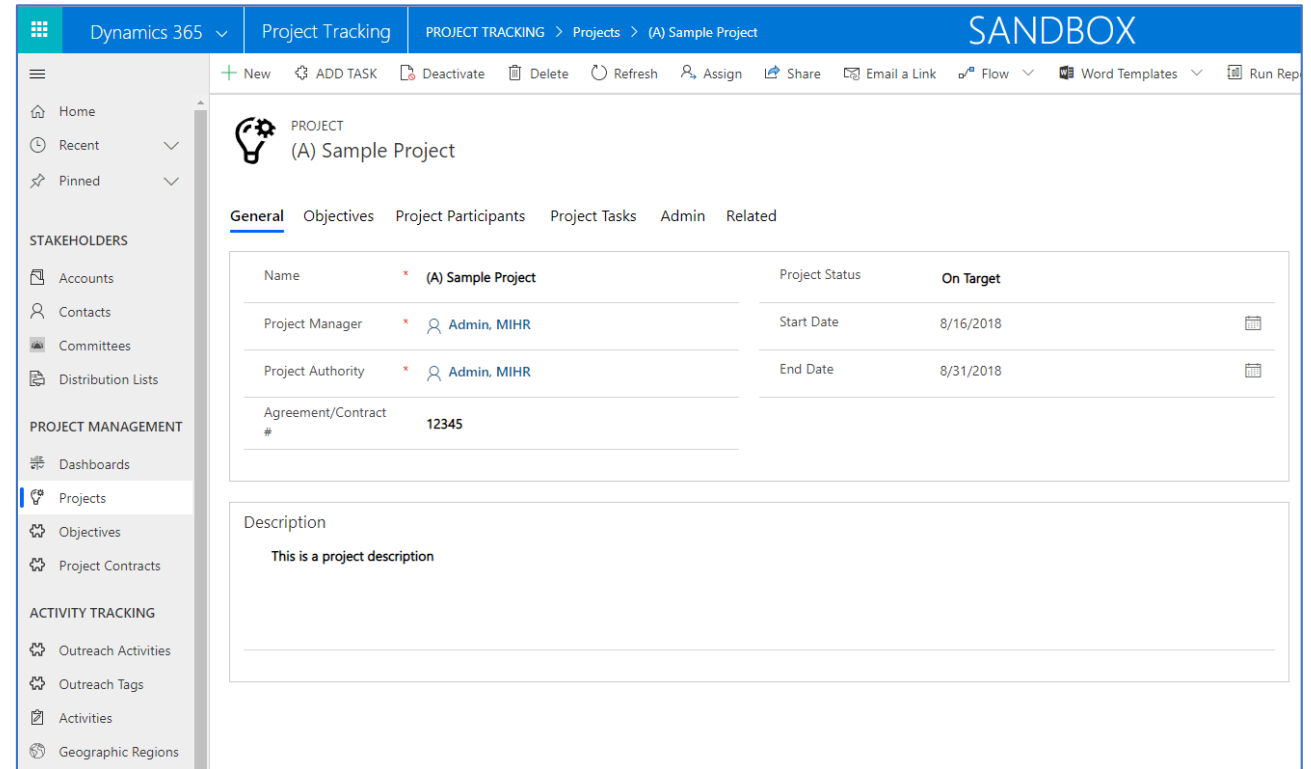
The screenshot displays the Dynamics 365 Project Manager web interface. The top navigation bar includes 'Dynamics 365', 'Project Manag...', and 'Projects > (A) Sample Project >'. The main content area is titled 'PROJECT : INFORMATION (A) Sample Project'. It features a 'General' tab with fields for Name, Project Manager, Project Authority, Agreement/Contract #, Project Status, Start Date, and End Date. A 'Description' field is also present. To the right is a 'NOTES' section with an 'Enter a note' input. Below the 'General' tab is an 'Objectives' section with a table listing project objectives. The bottom of the interface shows the 'System Status' as 'Active'.

Objective	Details	Project	Created On
A-1 Key Planning	Do some stuff	(A) Sample Project	8/16/2018 5:57 P...



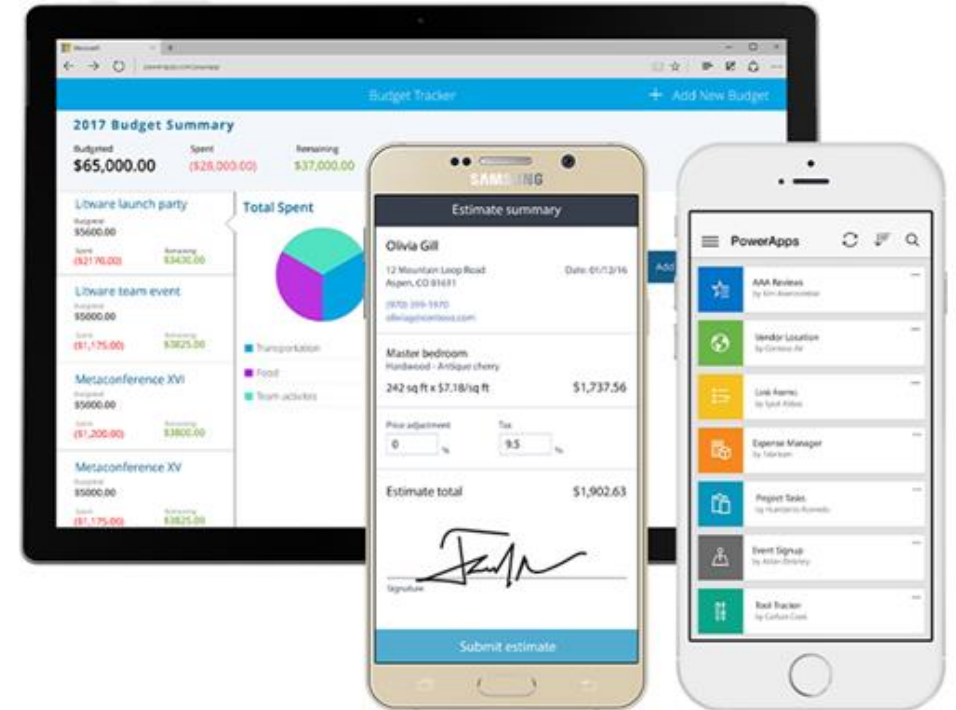
Unified Interface

- New, updated “CRM” style interface
- Scales to different layouts
- Faster
- Side Navigation, Tabs (remember CRM 2011?)
- Default experience moving forward
- Does not support Dialogs



Canvas App

- Traditional “PowerApp”
- Extremely flexible layout
- Variety of devices (web, mobile, etc)
- 100s of Connectors
- Constantly evolving



Model Driven App

- Traditional “CRM” style interface
- Entities, Views, Forms
- Standard Layout
- Backend is CDS database
- Build line of business apps quickly

The screenshot displays a Microsoft Dynamics 365 Model Driven App interface for a 'Project Tracking' application. The top navigation bar shows 'Dynamics 365', 'Project Tracking', and the breadcrumb 'PROJECT TRACKING > Projects > (A) Sample Project'. The right side of the header is labeled 'SANDBOX'. Below the header, a left-hand navigation pane lists various entities: Home, Recent, Pinned, STAKEHOLDERS (Accounts, Contacts, Committees, Distribution Lists), PROJECT MANAGEMENT (Dashboards, Projects, Objectives, Project Contracts), and ACTIVITY TRACKING (Outreach Activities, Outreach Tags, Activities, Geographic Regions). The 'Projects' entity is currently selected. The main content area shows the 'General' tab for '(A) Sample Project'. It includes a table with project details: Name (A) Sample Project, Project Status (On Target), Project Manager (Admin, MIHR), Project Authority (Admin, MIHR), and Agreement/Contract # (12345). Below the table is a 'Description' section with the text 'This is a project description'.

Name	Project Status
(A) Sample Project	On Target

Project Manager	Start Date
Admin, MIHR	8/16/2018

Project Authority	End Date
Admin, MIHR	8/31/2018

Agreement/Contract #
12345

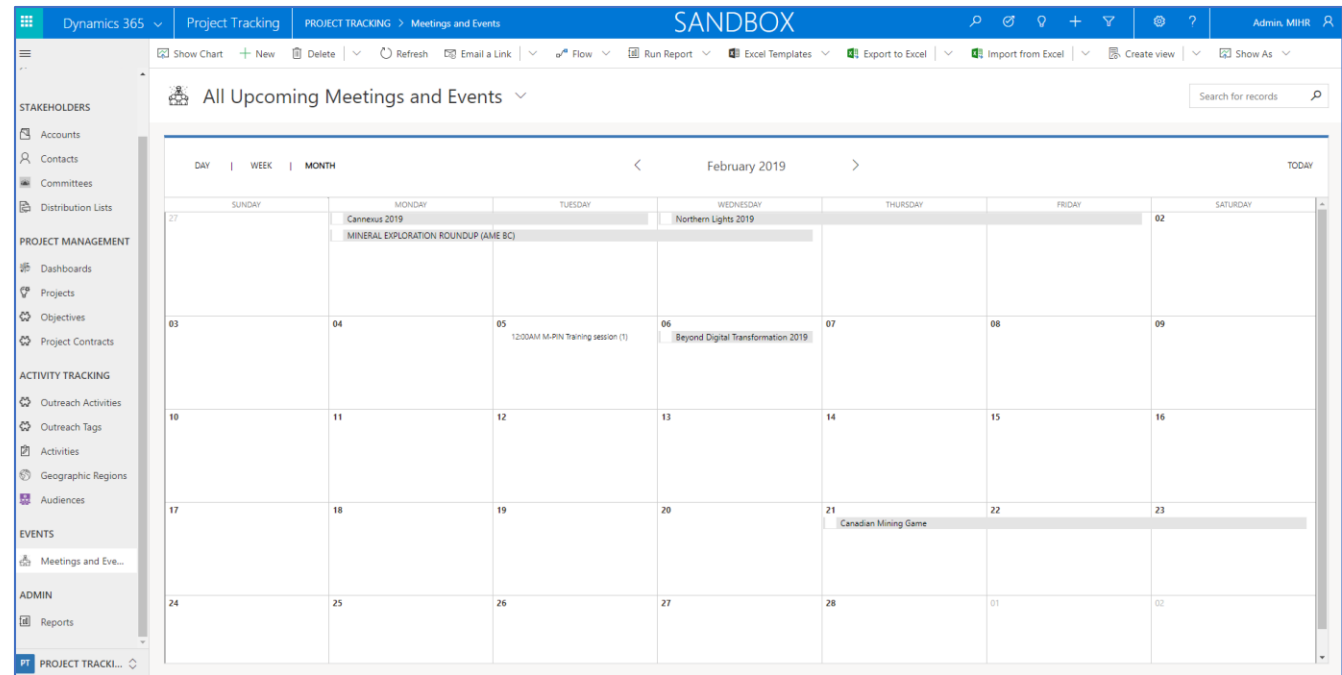
Description

This is a project description



PowerApps Component Framework

- Customized User Controls for Model Driven Apps
- Allows developers to create customized user experience controls
- Some created by Microsoft, many created by community
- Embedded Canvas App is type of Control
- Other examples are editable grid, calendar control, etc.



Dialogs

- Workflows with user interaction
- Use Case – Project Task Tracking



The “Old Way” – Using Dialogs in the Classic Web App



Task Tracking Against Project

Dynamics 365 | Project Manag... | Projects > (A) Sample Project > | **SANDBOX**

TASK | + NEW | + ADD TASK | DEACTIVATE | DELETE | ASSIGN | SHARE | EMAIL A LINK | RUN WORKFLOW | ...

PROJECT : INFORMATION
(A) Sample Project

General

Name *	(A) Sample Project	Project Status	On Target
Project Manager *	Admin, MIHR	Start Date	8/16/2018
Project Authority *	Admin, MIHR	End Date	8/31/2018
Agreement/Contract #	12345		

NOTES

Enter a note

There aren't any notes to show. To get started, enter a note.

Description

This is a project description

Objectives

System Status	Active
---------------	--------

Active



Adding Project Tasks Against Objectives

Dynamics 365 Project Management interface showing a project named "(A) Sample Project" in a sandbox environment.

PROJECT : INFORMATION
(A) Sample Project

Objective ↑	Details	Project	Created On
A-1 Key Planning	Do some stuff	(A) Sample Project	8/16/2018 5:57 P...
A-2 Project Management	Do some more stuff	(A) Sample Project	8/16/2018 5:58 P...
A-3 Outreach	Do a lot of other stuff	(A) Sample Project	8/16/2018 5:58 P...

Project Participants

Project ↑	Participant	Participating ...	Part. Role
System Status: Active			

Active



Adding Project Tasks Against Objectives

The screenshot displays the Dynamics 365 Project Manager interface. The top navigation bar includes 'Dynamics 365', 'Project Manag...', and 'Projects > (A) Sample Project >'. The main area shows the 'PROJECT : INFOR (A) Sample' page with tabs for 'General', 'Objectives', and 'Notes'. A modal dialog titled 'Project - Add Task To Objective' is open, prompting the user to 'Enter in Task Info'. The dialog contains the following fields and sections:

- Which Objective do you want to associate this new task?**: A dropdown menu with 'A-2 Project Management' selected.
- Date of Task**: A date picker showing '8/6/2019'.
- Enter subject/title of Task**: A text input field containing 'Development of Project Plan'.
- Add Details of Task**: A text area with the placeholder text 'Wrote project plan with key stakeholders and discussed delivery schedules.'
- Tip**: A section for additional information.
- Notes**: A section with a text input field labeled 'Enter a note'.

At the bottom of the dialog are buttons for 'Help', 'Summary', 'Next', and 'Cancel'. The background interface shows a 'Description' section with the text 'This is a project' and a 'System Status' section with the value 'Active'.



Copy Project Tasks to other projects

Project - Add Task To Objective
Prompt User if they want to copy this task to another project.

Do you want to copy this task to another project?
☒ No
☐ Yes

Tip >

Click to add comments

[Help](#)[Summary](#)

[Previous](#)[Next](#)[Cancel](#)



Building a Dialog

PowerApps

File Close Deactivate Show Dependencies Solution Layers Actions Help

Process: Project - Add Task To Objective Working on solution: Default Solution

Information

Common

- Information
- Audit History
- Solution Health Rules
- Solution Health Rules

Process Sessions

- Process Sessions

General Administration Notes

Hide Process Properties

Process Name* Project - Add Task To Objective Entity Project

Activate As Process Category Dialog

Available to Run

- ☒ As an on-demand process
- ☐ As a child process

Input Arguments

Variables

Steps

- Query Dynamics 365 for Project Objectives
Query: [View properties](#)
- Page: Enter in Task Info
 - Choose the Objective
Prompt and Response: [View properties](#)
Prompt: Which Objective do you want to associate this new task?
Response: Objective
 - Date
Prompt and Response: [View properties](#)
Prompt: Date of Task
 - Subject
Prompt and Response: [View properties](#)
Prompt: Enter subject/title of Task
 - Details
Prompt and Response: [View properties](#)
Prompt: Add Details of Task
- Create Task [View properties](#)
- Page: Prompt User if they want to copy this task to another project.
 - Do you want to copy this task to another project?

Status: Activated



Accomplishments

- Reduced clicks
- Easier for end users to understand
- Accurate reporting



Going Forward

- Dialogs have been deprecated
- Unified Interface
- Dialogs were never that pretty anyway



The “New Way” – Using an Embedded Canvas App

DEMO

The “New Way” – Using an Embedded Canvas App

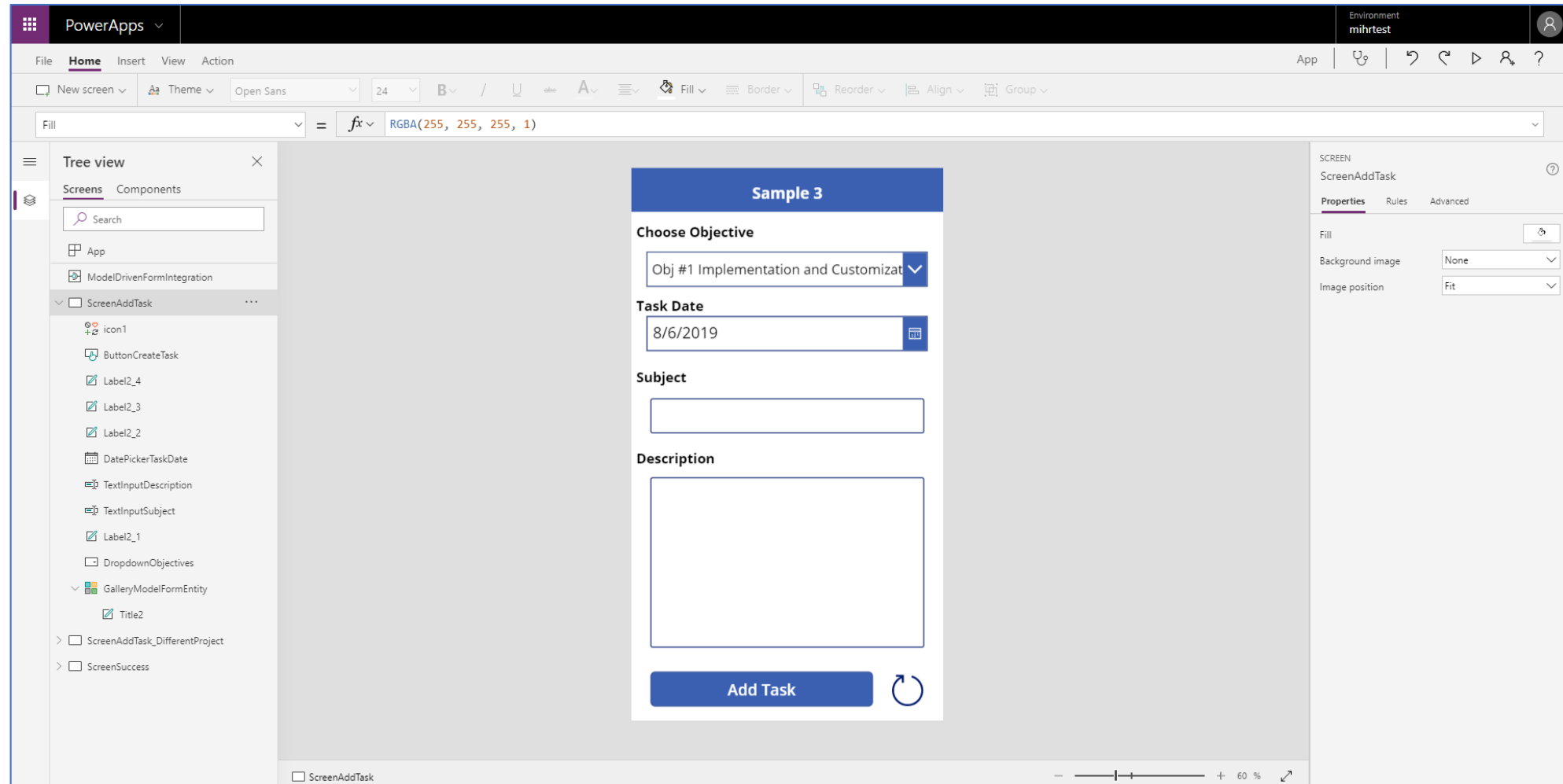
The screenshot displays the Dynamics 365 Project Tracking interface. The top navigation bar shows 'Dynamics 365' and 'Project Tracking'. The breadcrumb trail indicates the path: 'PROJECT TRACKING > Projects > (A) Sample Project'. The left-hand navigation pane is expanded, showing categories like 'STAKEHOLDERS', 'PROJECT MANAGEMENT', 'ACTIVITY TRACKING', 'EVENTS', and 'ADMIN'. The 'Projects' option under 'PROJECT MANAGEMENT' is selected. The main content area shows the 'Project Tasks' form for '(A) Sample Project'. The form has tabs for 'General', 'Objectives', 'Project Participants', 'Project Tasks' (active), 'Admin', and 'Related'. The form fields include: 'Choose Objective' (a dropdown menu with 'A-2 Project Management' selected), 'Task Date' (a date field with '8/6/2019'), 'Subject' (a text input field), and 'Description' (a large text area). Below the 'Description' field is an 'Add Task' button and a refresh icon. A message 'Add Project Tasks to Objectives' is visible on the left side of the form.



Embedding a Canvas App on a Model Driven Form

DEMO

Embedding a Canvas App on a Model Driven Form



Challenges – Writing Data back to CDS – Flow solution

Flow

Create Objective Task

Save Flow Checker Test

PowerApps

Triggered from PowerApp to create Tasks against Objectives in a Project

No additional information is needed for this step. You will be able to use the outputs in subsequent steps.

Create Task Record Linked to Objective

*Environment: mihrttest

*Entity Name: Tasks

*Due Date: Create new record_DueDate x

*Subject: Create new record_Subject x

Description: Create new record_Description x

Duration: Type the number of minutes spent on the task. The duration is used in

Priority Value: Select the priority so that preferred customers or critical issues are hand

Owner: Enter the user or team who is assigned to manage the record. This field is

Owner Type: Enter the user or team who is assigned to manage the record. This field

Regarding: Create new record_Regarding x

Regarding Type: new_objectives

Show advanced options

Update a record

*Environment: mihrttest

*Entity Name: Tasks

*Record Identifier: Task x

Due Date: Enter the expected due date and time.

Subject: Type a short description about the objective or primary topic of the task.

Show advanced options



Preference?

Project - Add Task To Objective - Google Chrome

Project - Add Task To Objective

Enter in Task Info

Which Objective do you want to associate this new task?

A-1 Key Planning

Date of Task

Enter subject/title of Task

Add Details of Task

Click to add comments

Help Summary Next Cancel

Dynamics 365 Project Tracking

PROJECT TRACKING > Projects > (A) Sample Project

PROJECT (A) Sample Project

General Objectives Project Participants Project Tasks Admin Related

(A) Sample Project

Choose Objective

A-1 Key Planning

Task Date

5/8/2019

Subject

Description

Add Task



Other stuff you should replace

- Use Flows instead of Workflows
- Unified Client instead of legacy web client
- Online instead of on-prem
- PCF Controls vs Web Resources
- Outlook App instead of Outlook Client
- PowerBI vs SSRS?



Thank you

